

THE RICHEBÄCHER LETTER

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“Operationally, the asymmetry is that there exists a panoply of liquidity-enhancing, credit-enhancing, and capital-enhancing measures that can be activated during an asset market bust or a credit crunch... but no corresponding liquidity- and credit-restraining and capital-diminishing instruments during a boom... Sensible proposals from the SEC in the U.S. that require putting a range of off-balance sheets of commercial banks are waived or postponed for the duration of the financial crisis... but where was the matching insistence on increasing capital and liquidity ratios during the good times.

We even have proposals now that mark-to-market accounting rules be suspended during periods of market illiquidity... There have been no calls for mark-to-market accounting and reporting standards to be suspended during asset price booms and bubbles.

Fundamentally, what drives this operational asymmetry is the fact that the authorities are unable or unwilling to let large highly leveraged financial institutions collapse. There is no matching inclination... to restrain in other ways extraordinarily profitable financial institutions. This asymmetry creates incentives for excessive risk taking by the financial institutions and has undesirable distributional consequences.”

Willem H. Buiter

**Central Banks and Financial Crises
Jackson Hole, Wyoming August, 2008**

BREAKING THE BUBBLE ADDICTION

Dr. Kurt Richebächer, like many Austrian School economists, realized asset bubbles and credit booms tend to go hand in hand. Higher asset prices raise collateral values and, hence, they also raise the borrowing capacity of wealth holders. Higher leverage allows asset prices to be bid up above fundamentally justified prices. Professional investors may term this “excess liquidity,” but it is, in fact, little more than excessive credit growth, often built on the back of new financial instruments that allow even more leveraged bets to be placed on financial assets.

These dynamics positively feed back on each other over time — higher asset prices beget higher collateral values, higher borrowing capacity, higher leverage and higher buying power, thereby yielding higher asset prices in an upwardly spiraling, tornado-like fashion. Tornadoes, however, do not last forever — they ultimately blow themselves out. In prolonged asset bubbles, eventually either new entrants to the pyramid scheme are priced out of the game (as in housing bubbles) or too many greater fools end up vying for too few chairs as the music builds to an impossible pitch (as in IPO allocations in the Internet bubble). Expected returns on assets are falsified by fundamental results that fail to meet bubbly expectations. The capacity to service the debt taken on during asset bubbles with underlying income flows or even new debt may be undermined. Or, in some cases, disappointed return expectations and damaged debt servicing capacity arise at roughly the same time.

Many central bankers refuse to see that credit booms are typically on the other side of the coin that has asset bubbles stamped on the other side. Oddly enough, the central bank for central bankers, the Bank for International Settlements (BIS), does not seem to have this same blind spot. Of those central bankers willing to recognize the large debt residue left over after an asset bubble has burst, many believe they have the tools to contain the damage to credit conditions and the economy. Conventional wisdom in these matters is likely to be seriously challenged by events as the current G-7 recession, which is starting to take on more of a global color, unfolds.

DISTORTIONS IN FINANCIAL MARKET DYNAMICS

Austrian School economists tend to view the linkage of asset bubbles and credit booms as artifacts of two tendencies in contemporary economies. First, central banks have a bias toward setting the price of credit too low, especially relative to the rate that would result if credit markets were allowed to clear at their own equilibrium price without the introduction of new credit money by the central bank. Second, credit growth tends to expand well beyond the level of voluntary saving out of business and household income flows, especially with a banking system in which only a small portion of the deposits are required to be held as reserves with the central bank.

But perhaps there is more to this linkage of credit growth and asset bubbles than the distortions introduced by fractional reserve banking and foolhardy price setting by policymakers. Perhaps, just as there are aspects of markets for durable consumer goods, capital equipment and structures that complicate price adjustment dynamics (as discussed in the previous letter), there are also characteristics of contemporary financial markets that distort the price adjustment process.

For examples of these complicating factors in financial market clearing, we need look no further than the revelations of Andrew Crockett, former general manager of the BIS and former chairman of the Financial Stability Forum. During the Fourth Hong Kong Monetary Authority Distinguished Lecture in February 2001, former Mr. Crockett detailed the characteristics of financial markets that distinguish them from the textbook models of how prices adjust to swiftly and smoothly equilibrate supply and demand. These unique characteristics of financial markets include the following (emphases mine):

*First, the financial industry is unlike other sectors in that **the feedback mechanism from supply to price is less effective, or even perverse**. In a traditional industry, an expansion of supply puts immediate downward pressure on price, squeezing profit margins, reducing the incentives to invest and encouraging exit from the industry. In the financial sector, the price that falls when the supply of credit increases is the interest rate. This has the effect of pushing up asset values and appearing to strengthen the balance sheet of borrowers and intermediaries alike. Rising asset values encourage leverage and credit expansion...*

Second, fundamental value, the basis on which decisions to buy and sell, to lend and borrow, are made, is extremely hard to assess... To an important extent, value, like beauty, it is in the eye of the beholder. Its assessment is subject to powerful waves of shared optimism or pessimism. Investors are prone to see new paradigms — individual stocks, even stock indices, can move by large amounts even in the absence of significant new information.

My third conclusion is that cyclical upswings are typically sustained by overly optimistic expectations and muted perceptions of risk. The fact is that financial intermediaries are better at assessing relative risks at a point in time than projecting the evolution of risk over the financial cycle.

THE RICHEBÄCHER LETTER

In Memory of Dr. Kurt Richebächer



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Financial markets, then, like markets for durable goods, are capable of demonstrating exceptions to the typical textbook market of how prices adjust to bring supply and demand into equilibrium. The former chairman of the Financial Stability Forum has come to recognize bubble dynamics, in which asset price increases do not always reduce demand for assets while at the same time raising the supply of assets offered for sale may be endemic to the structure of financial markets. As Crockett noted, rising asset prices can encourage trend-following investors to demand more stocks, bonds or commodities, while at the same time encouraging existing owners of those assets to hoard them. Rising asset prices fail to reduce demand and raise supply in such situations — excess demand rises, rather than falls, as asset prices increase. Prices never settle — they run away in such situations. That is not to argue financial markets are always and everywhere in a state of disequilibrium, or in the process of bubbling over. Rather, as Crockett openly acknowledges, bubble dynamics are a latent tendency of asset markets that can emerge under the right conditions. In fact, Chairman Crockett has identified a key characteristic of financial markets once isolated by the late heterodox U.S. economist Hyman Minsky:

In financial and capital asset markets in which speculative and conjectural elements are powerful, the principle of substitution does not always apply. A rise in the relative price of some set of financial instrument or capital assets may very well increase the quantity demanded of such financial or capital assets. A rise in price thus breeds conditions conducive to another such rise.

INVESTMENT DECISION MAKING UNDER UNCERTAINTY

Although Mr. Crockett appears to have rediscovered Minsky's insight, he leaves aside some of the more important characteristics of financial markets that make them prone to bubble dynamics. Prices in asset markets are formed with a view toward future economic and financial market conditions, yet these conditions generally cannot be known with certainty. All we know is that we don't know more than a small slice of the full spectrum of possible outcomes.

The simple fact is, when it comes to economic and financial matters, we are not dealing with mechanistic systems, like billiard balls colliding on a pool table, or elements in the periodic table. Biology probably offers a more apt metaphor, namely the messy process of evolution, with genetic mutations and punctuated equilibriums probably closer to the mark. Future outcomes and behaviors in the realm of economics and finance do not always precisely repeat past observed results. In addition, as U.S. economist Paul Davidson has noted, we have yet to figure out a way of taking samples from the future. Asset price formation is, therefore, deeply tied up with how we as investor and economic agents attempt to best cope with fundamental uncertainty about the future.

That's why some economists and many practicing investors find that a very different game is played in financial markets than the one described in conventional microeconomic textbooks. Rather than endeavoring to build more accurate calibrations of possible payoffs under various financial market and economic outcomes, most investors will tend to assume, as a mental shortcut or a simplifying rule of thumb, that their experience in the recent past is representative enough of their likely experience in the near future. They will construct portfolios on the basis of such simple trend extrapolation.

Adaptive expectations — that is, investor expectations that extend recent trends into the future — offer one way of coping with fundamental uncertainty.

In addition, under conditions of fundamental uncertainty, rather than attempting to position portfolios on the basis of the most accurate forecast of a fundamentally uncertain future, more sophisticated investors will try to game consensus expectations about the future. Essentially, investor behavior becomes governed or dominated by speculations on the speculations of other speculators. Under such conditions, strategic behavior unfolds to various degrees as different classes of investors try to stay one step ahead of the crowd, and a proclivity toward bandwagon and bubble outcomes can emerge.

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This tendency to adopt strategic gaming behavior by investors can be especially accelerated during periods when uncertainty about the true model influencing macrofinancial outcomes arises. For the most part, we endeavor to form conceptual models of how the world works in order to guide us in making decisions today that require assessments of an uncertain future. But when the facts of experience begin to disagree with these mental models, we fall back on behaviors and practices that can breed asset price bubbles.

When models grounded in conventional wisdom are disrupted by events that do not fit the model, or do not fall into the normal range of behavior investors have observed in the past, they tend to shift toward behavior that encourages following the herd, under the assumption that the herd collectively must have more insight into the new model than any one individual is capable of acquiring.

Economic agents are not simply passively observing existing resource endowments, production and engineering diagrams and fixed consumer preferences, as is frequently the case portrayed in mainstream economics.

Model uncertainty — a subject deeply investigated by Mordecai Kurz of Stanford University — thereby heightens the reliance on extrapolative trend-following behavior. We've seen this in the dot-com bubble of the late '90s, the long bond bubble earlier this decade, the housing bubble and the commodity bubble. When markets begin to move outside the normal range of historical outcomes and valuation metrics, investors tend to drop their prior beliefs about how the world works, and they will tend to stampede in the direction of recent price trends, driving asset prices even further away from what were once commonly believed to be underlying fundamental values.

The Austrian School of economics has always made room for fundamental uncertainty and has always rejected the billiard ball/physics-envy approach to market matters. This is especially true in the work accomplished in the Austrian tradition regarding the analysis of entrepreneurs. Actions are taken without full knowledge of present or future supply-and-demand conditions, even by those who have most ardently studied past supply-and-demand responses. In the case of introducing new products or embarking on new production technologies or organizational processes, entrepreneurs have very little to go by. There is no Web site or spreadsheet that reveals the slope and position of the relevant supply-and-demand curves that so beautifully decorate economic textbooks. Nor do these curves remain to be discovered by trial-and-error behavior — often, they remain to be created by intelligent marketing and managerial efforts. After all, as the Austrian School has always understood, we live in a world where human action can shape the economic environment.

Economic agents are not simply passively observing existing resource endowments, production and engineering diagrams and fixed consumer preferences, as is frequently the case portrayed in mainstream economics.

The standard Austrian critique of asset market dynamics, therefore, may not go far enough, even on its own terms. Policymaker distortions can play a role in asset bubbles. Banking system design can lead to excessive credit growth. But the design flaws in financial markets that give rise to symbiotic asset bubbles and credit excesses go well beyond the meddling of politicians and policymakers in markets. They are endemic to the design and dynamics of contemporary financial markets themselves.

Asset bubbles have occurred without fractional reserve banking and without central banks target the price of short-term credit. Bubble behaviors are, as former Chairman Crockett described, a latent potential in financial markets given the many factors complicating the ability of price adjustments to equilibrate supply and demand in these markets. Furthermore, as Austrians already recognize in the case of entrepreneurial activity, the fact that future macrofinancial outcomes cannot be adequately captured with probabilities, like a game of blackjack played with a single deck of cards, leads to a set of strategic behaviors that complicate the ability of price changes to rebalance excess demand conditions. Until these insights are recognized and explored, the design flaws inherent in contemporary financial markets are unlikely to be properly diagnosed and adequately reduced.

THE CRUEL IRONIES OF HISTORY

A decade ago, U.S. central bankers and Wall Street executives were quick to offer sound advice to Asian financial authorities. As it was, the Asian/LTCM/Russian bond default crisis in the late summer/fall of 1998 may have changed asset market behavior and regulatory regimes in Asia, but the message was largely lost on the U.S. financial establishment, for which further deregulation, in fact, was the eventual outcome, including the official demise of the Glass-Steagall regulatory framework, adopted a lifetime after the strains of the Great Depression.

Obviously, with supposedly well-capitalized institutions, sound regulatory structures and transparent accounting, U.S. financial institutions were viewed as unlikely to ever find themselves in such a fix as Asian banks did in the late '90s. Multiple stress tests like the bursting of the tech/telecom bubble, the 2002–3 corporate credit distress and other significant bumps in the financial road were believed to undeniably prove the resilience and superiority of the Anglo-American financial structure.

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In addition, the built-in redundancy of a commercial banking system surrounded by thick, highly liquid, ever innovating financial markets was frequently flaunted by then-Chairman Alan Greenspan. The pinnacle of financial system design had been, by all accounts, finally achieved with the widespread securitization of bank loans and the various forms of financial re-engineering designed to custom tailor risk to investor needs. A “new financial architecture” (NFA) had been put in place in the United States, and it became the envy of the world, as well as the only apparent model for financial market design.

A decade later, what have we learned? The new financial architecture may have produced a financial system that was highly efficient at partitioning and distributing risk — but at the price of creating a financial system dangerously inefficient in assessing and appropriately pricing risk. It is now widely recognized that incentive structures in NFA were heavily skewed against due diligence of any sort (and in favor of fee-maximizing volume generation wherever possible). The instruments themselves, which in many cases were designed to maximize opacity, complexity and heterogeneity, in part because bespoke or customized products were less easily commoditized and copied, and hence earned higher fees for brokerage houses and investment banks, were not easy to analyze, further raising the cost of due diligence.

Given admonitions and advice from a former Fed governor and Wall Street to Asian bankers over a decade ago, it should come as no surprise that the NFA has collapsed in on itself. Nor should it come as any surprise that the great re-regulation of finance has only just begun.

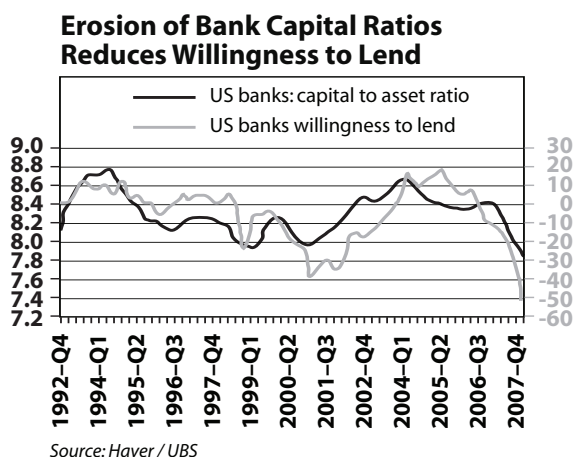
THE GREAT RE-REGULATION OF FINANCE

Fair-weather free marketers are becoming a dime a dozen as the deep, fatal flaws in the NFA have been exposed. At the heart of the oncoming re-regulation of finance will be none other than the poignant, albeit belated, recognition that we inadvertently designed a financial system based on procyclical capital ratios that virtually ensure a roller-coaster ride of credit excesses and asset bubbles.

Under the first principles of finance, capital should always be viewed as the penultimate margin of safety — the buffer between the viability of a financial institution and bankruptcy. Capital requirements should, therefore, be encouraged to vary in an anti-cyclical fashion by design. As an expansion in the economy is sustained, banks and other financial institutions should face incentives to increase their capital ratios, rather than their leverage. Basel II requirements do nothing to rectify the current misinformed approach to capital ratios — in fact, they tend to aggravate it.

The deleveraging of investment bank balance sheets and the shrinking of commercial bank balance sheets now under way are both aimed at rebuilding the capital ratios of individual financial institutions. This individually intelligent step, however, can end up spoiling asset prices, contracting credit growth and destroying market liquidity in the midst of what is already a bear market in financial assets as well as an economic recession. What appears sensible and rational for one individual institution can create serious challenges at the level of the financial system and the economy as a whole.

As displayed in the chart below, a fall in the ratio of bank capital to total assets tends to be associated with a tightening in bank lending standards. Loan losses mount during a recession and tend to erode bank capital. Bank lending standards are tightened in response, leading to a decline in credit growth. Actions by financial institutions to rebuild their own capital/asset ratios during recessions not only thwart the Fed's attempts to reliquify the financial system and restart economic growth, but they also suffer from the fallacy of composition.



What appears rational and necessary for one financial institution paradoxically ends up producing just the opposite effect at the level of the financial system as a whole. Irving Fisher recognized this perverse tendency in his 1933 description of the debt/deflation process — attempts to reduce individual debt loads resulted paradoxically in a larger debt load for the system as a whole. The rational attempts by institutions and individuals to pay down debt can actually exacerbate debt distress, particularly if asset sales and expenditure reductions are the main channels employed by institutions and individuals to deleverage. Asset sales — especially forced asset sales, as in the case of a foreclosure — can reduce collateral values and, hence, the net worth of existing borrowers, while expenditure cutbacks can shrink the income and, hence, debt-servicing capacity of other borrowers who may have been expecting to receive a higher level

of reverse from those expenditures. A vicious cycle can take root under such circumstances, whereby attempts to pay down debt paradoxically increase the burden of debt.

Over a lifetime ago the great American economist Irving Fisher described the paradox of deleveraging as follows in his seminal essay, “The Debt-Deflation Theory of Great Depressions”:

... [D]eflation caused by the debt reacts on the debt... if the over-indebtedness with which we started was great enough, the liquidation of debts cannot keep up with the fall of prices which it causes. In that case, liquidation defeats itself... Then, the very effort of individuals to lessen their burden of debts increases it, because of the mass effect of the stampede to liquidate in swelling each dollar owed. Then we have the great paradox which, I submit, is the chief secret of most, if not all, great depressions: The more the debtors pay, the more they owe. The more the economic boat tips, the more it tends to tip.

While Fisher was addressing the extreme example of a period of deleveraging that provokes deflation, or a general fall in final product prices, similar thwarting dynamics apply in the case of a period of deleveraging that provokes asset price deflation. Outside some corridor of stability, whose boundaries may not be distinctly and sharply visible beforehand, and are certainly not fixed through all time as institutions and behaviors evolve, attempts by some agents to reduce the leverage they hold on their balance sheets can lead to falling asset prices and hence falling net worth for all agents. As net worth shrinks, more households at the margin approach or enter a state of bankruptcy, or negative net worth, and most household experience a reduction in their borrowing capacity. Selling assets and reducing debt begets more selling of assets. In the extreme, this can spread into a product price deflation, which increases the real burden (the sacrifice of real resources under the command of a household) of paying back debt.

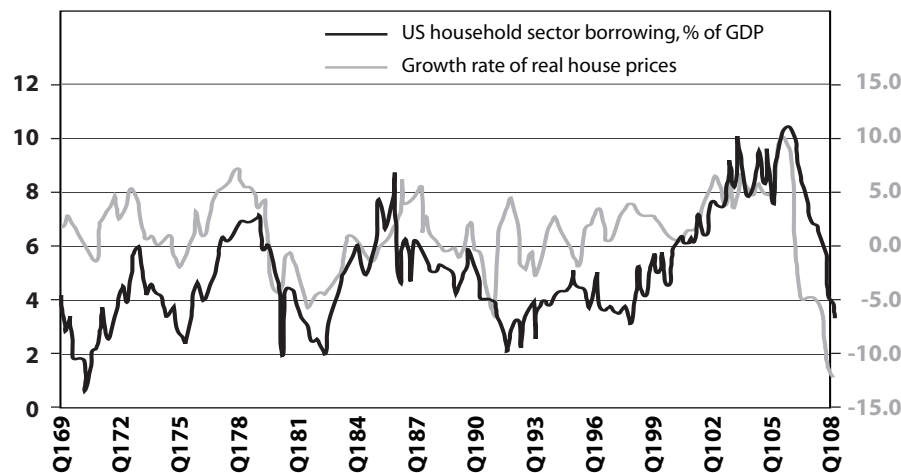
To make any economic sense whatsoever, the present arrangement regarding the capital adequacy ratios of financial institutions must simply be stood on its head. Large, leveraged financial institutions of all stripes must be encouraged to build capital/asset ratios during good times, rather than leveraging their balance sheets as business

cycle expansions and bull markets progress. Without a sufficiently large margin of safety — which is one of the key roles of the capital cushion — both economic recessions and bear markets will tend to set off periods of significant financial instability.

THE CURRENT UNRAVELING

Minsky often emphasized that escalating debt-to-income ratios tend to be associated with (and perhaps even require) escalating asset prices. In the case in which debt is borrowed to finance portfolio positions, the basis for the correlation depicted in the UBS chart below is obvious. In other cases, the linkage is more indirect, often through Kalecki equation relations among increased deficit spending (or loan expenditures, as J.M. Keynes put it) by a sector, improved profitability and asset repricing on the basis of improved profit expectations or reduced risk premia (both of which tend to lead to more aggressive shifts in portfolio preferences). In addition, from a creditor's perspective, rising asset prices will tend to increase values of collateral underlying credit agreements, and thus will be perceived as raising the borrowing capacity of any economic agent or sector.

Falling Home Prices Reduce Household Borrowing Capacity

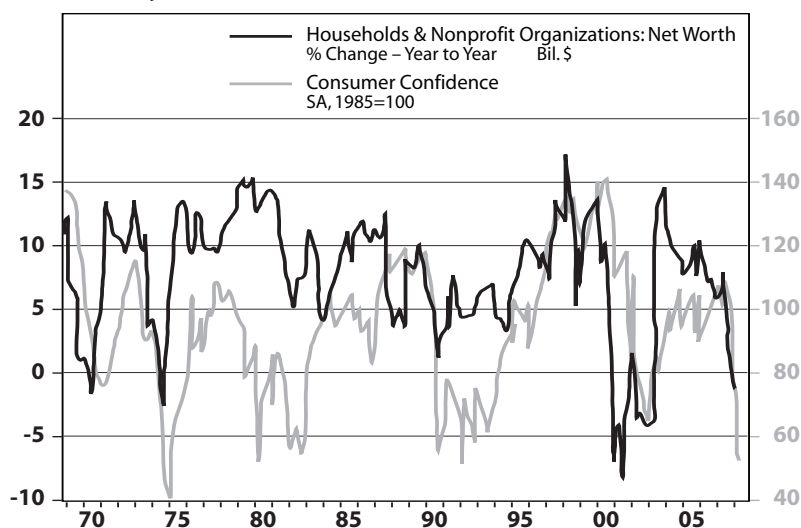


Sources: Haver

One of the crucial insights that emerge from any serious examination of the history of financial instability is that once asset price appreciation reverses — and such reversals tend to be especially sharp when asset bubbles go bust — credit growth falls sharply. Accordingly, following one of the sharpest reversals in real home prices in the past 40 years, it should come as no surprise to Wall Street economists, strategists, professional investors and policymakers if a severe credit crunch emerges for U.S. households.

Since U.S. households are still in record deficit-spending territory, and U.S. economic growth and profitability is still heavily dependent upon U.S. household deficit spending, it would seem obvious that the baseline scenario for U.S. growth should remain decidedly subpar, if not deeply recessionary, until and unless home price stabilization and reflation can be achieved. Few policymakers, few Wall Street economists or strategists and few professional investors are prepared to fully

The Money Value of Wealth Effects Consumer Confidence

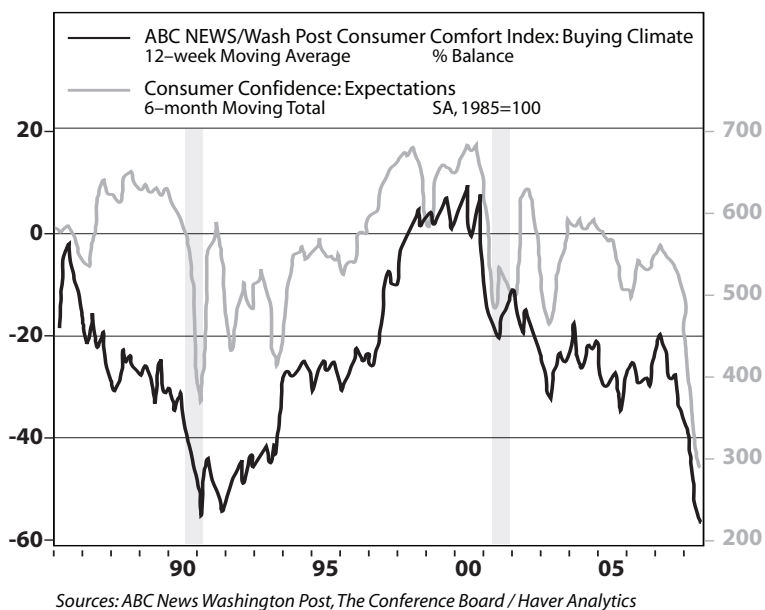


Sources: Federal Reserve Board, The Conference Board / Haver Analytics

acknowledge this simple truth. Rather, their persistent bias appears to include a deeply religious belief in the ultimate omnipotence of the Fed, along with a proclivity to play the game of looking through the valley of recessionary news which is so popular among long-only institutional investors.

The obvious link between household borrowing activity and home prices is that escalating home prices encourage portfolio preference shifts by households in favor of real estate, and purchases of homes usually require the assumption of mortgage debt. But appreciation in home prices also tends, via wealth effects, to lower the desired saving rate of households. Appreciating assets are taken as

Consumer Expectations and Buying Plans Have Collapsed



a valid substitute for saving for things like future college education, retirement, or other expected big ticket expenditures. As the propensity to save falls, and the propensity to consume rises, multiplier effects of any loan expenditure/deficit spending on income growth will tend to expand. Similarly, any shocks to the system will get amplified more.

The various channels through which money values of wealth can influence real economy activity (as in quantities of goods and services produced and consumed, numbers of people employed, or stocks of tangible capital equipment and goods inventory) are often treated as something of a mystery. As suggested in prior letters, collateral values, desired deficit spending and credit availability are, no doubt, the key cogs in the wealth-effect transmission

mechanism. Minsky, C.P. Kindleberger, Fisher and J. Maynard Keynes, as well as many of the Austrian economists, well understood the interaction of asset values, credit growth, deficit spending and economic growth.

But the relationship behind the wealth effect may be even simpler than that. While wealth — financial wealth more so than real estate wealth — is very concentrated in the United States, over four decades of consumer confidence results suggest the rate of growth of household net worth in money terms is closely related to the level of consumer confidence. While the relationship weakened a bit from 1977–87 (perhaps as lessons about money illusion were recognized by households going through the spike and reversal of the great inflation), if anything, the recoupling of the place of wealth accumulation and the level of consumer confidence has been even stronger since 1994, when the New Economy bubble was just beginning to take off. About all we can say now is that this is about as bad as consumer confidence ever gets, at least in the past 40 years of available history. By inference, this is probably in the midst of the most severe episode of household wealth destruction in four decades, as well.

Prior research has shown that consumer expectations matter more than consumer confidence indexes in influencing consumer spending growth. Again, it is notable that expectations, at least in the Conference Board survey, have plunged further than they did in the prior two recessions. In addition, a weekly ABC News/Washington Post survey on the perceived buying climate for consumers is presently falling below the 1990–91 recession lows. Yet few talking heads are willing to admit the United States is already in a recession. One nation under denial.

Household net worth growth, in money terms, also bears a close relationship to consumer expectations, but the correlation is not as close with consumer confidence and wealth. Note that in the 2001 recession, expectations did not sink as much as net worth, nor did they sink as much as consumer confidence. There is, clearly, no similar decoupling this time around. This time around we have equity values and home values submerging. Last time around, equity values were falling, and the fall was particularly concentrated in the tech and telecom stocks. As stock holdings are concentrated in the upper income households, who arguably have a larger capital cushion and so have a greater capacity to absorb hits to their net worth, 2001 may not be the best example to apply to 2008. This recent episode of wealth destruction may be, accordingly, more of a threat to the economy than the bursting of the New Economy bubble was seven years back. To presume this time will not be different is foolhardy at best.

LIQUID ASSETS AND HOUSEHOLD MORTGAGE OBLIGATIONS

Roughly up to the point at which the New Economy bubble originated, the household sector held enough deposits (or short-term liquid assets) to extinguish, at least in theory, its entire stock of mortgage debt. For most of the post-World

War II era, the norm was for the household sector to possess liquid assets $1^{1/2}$ –2 times the size of the mortgage debt outstanding. Again, in theory, at the level of sector averages, this provided an ample margin of safety, or cushion of liquidity, to manage real estate-related debt liabilities. In reality, the distribution of mortgage liabilities was always more widespread than the concentration of cash and near cash assets, and so it was always likely that some households would drown in what, on average, appeared to be a 3-foot high river of mortgage debt.

Also, the mortgage liabilities of one household are often the bank assets backing bank liabilities, which take the form primarily of bank deposits held by another household. Extinguishing mortgage debt en masse simply implies a reallocation (and, most likely, a renewed concentration) of existing cash assets across the household sector into the portfolios of creditors, since to a great extent, these liquid funds are simply intermediated by banks and other financial institutions.

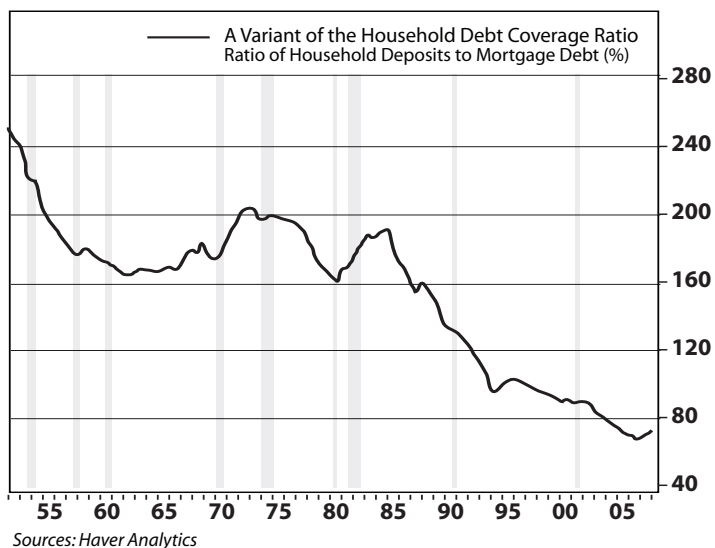
Regardless, we remain well off the normal margin of safety for mortgage debt that arguably persisted over the three decades from 1955–85 through a variety of macrofinancial environments and policy regimes. To get even halfway back to the prior margin of safety in the household sector (and remember, we are looking at only cash and near-cash holdings relative to mortgage debt, not total household liabilities, which would, of course, include other forms of consumer debt as well) would require either a cessation of new mortgages or a surge in household saving out of income flow. The latter, barring a sharp acceleration of deficit spending by the government or the business sector, or

a rapid reduction in the net saving position of foreigners (that is, a dramatic reversal of the U.S. trade deficit), would at this juncture tend to risk a further compression of the U.S. economy and the financial system.

The reduction of deficit spending by the largest deficit spending sector creates a vacuum for the income flows of other sectors, since for every sector spending more than they earn, some other sector, or set of sectors, must earn more than they spend.

This is the fault line upon which the “great moderation” regime of the past quarter century was built. Repeated asset bubbles were required to encourage households (and, to a lesser extent, businesses) to run down their margins of safety, to deficit spend and to run up their debt loads. As tension builds along this fault line in the current recession, and the fault visibly ruptures, the Great Moderation crumbles at its very foundation.

Erosion in the Margin of Safety for U.S. Households



CAN CAPITAL SPENDING CARRY THE LOAD?

In Austrian School depictions of the business cycle, relative prices play an important role in guiding economic activity. Late in the expansion phase of a business cycle, conventional Austrian business cycle theory suggests interest rates have been suppressed by policymakers and fractional reserve bankers to weaken the reward of saving (or abstain from current consumption). A low interest rate that has not been engineered by central bank credit creation is associated with a low time preference for consumption. Households can wait to enjoy the fruits of their labor, and so the mix of production can be dominated by an increasing share of newly fabricated capital equipment and other durable goods over less durable consumer goods. However, when policy makers artificially suppress interest rates, the true time preference of consumption by households is not expressed in the marketplace, and a mismatch arises between entrepreneurial plans and actions, and the true desires of households.

Accordingly, distortions to the capital stock arise, and since durable capital equipment and nonresidential structures tend to be designed for specific uses, these distortions take time to resolve. In Austrian School approaches,

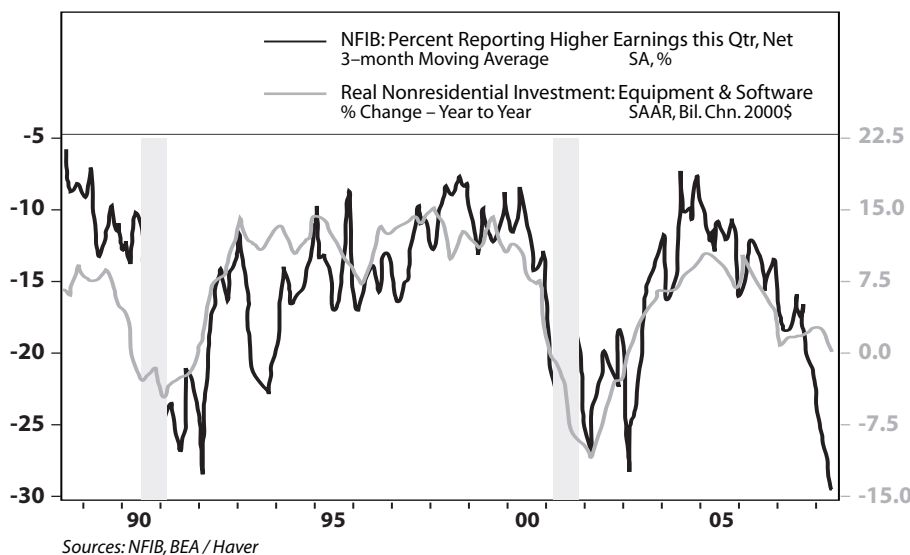
relative prices play a significant role in signaling the scale and scope of economic activity. Relative prices provide the signal to resolving distortions in the sectoral mix of the capital stock.

In the recent business cycle expansion, the production structure, or the capital stock, was excessively skewed toward the production of residential real estate and consumer goods and services. With respect to the current situation in the United States, the resulting excess capacity in the consumer and housing sector must eventually produce a fall in the relative price of consumer products and housing going into the early stages of the recession. In theory, then, the incentive to produce then shifts back toward capital equipment, and some automatic reallocation of economic activity in that direction should help cushion the blow. This, it should be noted, is quite at odds with the conventional sequencing expected in the renditions of Austrian Business Cycle theory provided by Mises and Hayek, but we need only adapt the analytical framework to the peculiarities of this recent asset bubble in housing, rather than discard it entirely.

The resulting excess capacity in the consumer sector eventually produces a fall in the relative price of consumer goods going into the early stages of a recession. The incentive to produce then shifts back toward capital equipment, and some automatic reallocation of economic activity in that direction helps cushion the blow.

In recent quarters, the United States had experienced falling corporate price inflation, at least as measured by the nonfinancial corporate price deflator, and falling profit margins, as discussed in prior editions of the *The Richebächer Letter*. Profit expectations are informed in no small part by recent profit growth trends and sustained surprises to the prior trend. Adaptive expectations formation applies to entrepreneurs and managers, not just wealth holders, investors and lenders.

Capital Spending Is Likely to Follow Profit Expectations Lower



The recent contraction in profit margins has been especially damaging to small-business earnings expectations. Walk down your local Main Street and you may notice more empty storefronts with “For Lease” signs on them. As displayed on the left, small-business profit expectations bear some positive relationship to inflation-adjusted equipment and software spending growth. From the looks of it, capital spending is imperiled by the absence of corporate pricing power and the subsequent compression of profit growth expectations.

Those investors expecting runaway inflation, as well as those expecting sustained stagflation, may be missing how the erosion of corporate pricing power on the back of demand growth deceleration, is significantly raising recession risks. Profits are the signal to expand production, and eventually, any sustained expansion of production activity is likely to require more capital spending. With profits now under pressure, capital spending is unlikely to take up the slack introduced by weaker consumer spending on the back of the housing bust regardless of what relative prices may signal in terms of sectoral shifts in the composition of capital spending. As will be discussed in a future letter, any cushioning and eventual reversal of the recession will require either a sharp improvement in the trade deficit or sustained fiscal stimulus until the housing market has stabilized and profitability conditions have been re-established.

REVERSING THE U.S. TRADE DEFICIT

Improvement in the real trade balance has been a key element in keeping real GDP from displaying the typical recession trajectory. This is one of the sharpest reversals in the real trade balance ever, although part of it, no doubt,

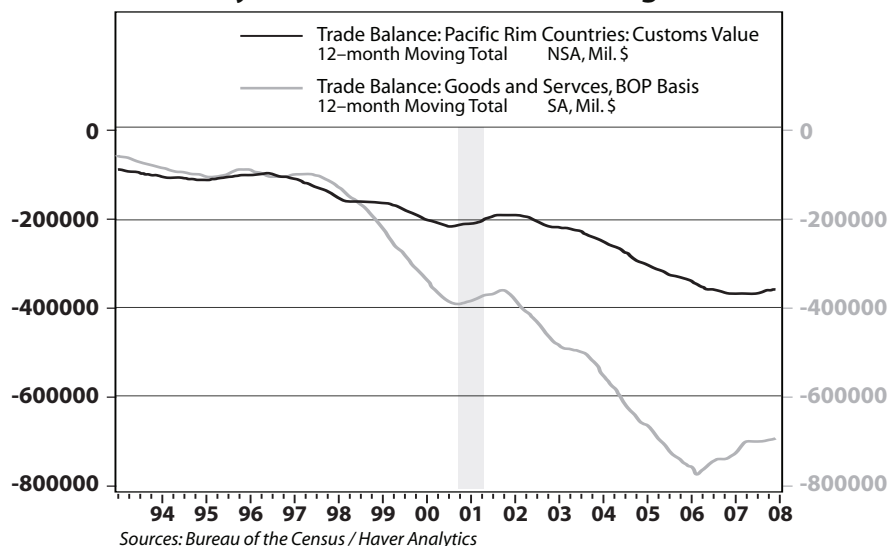
reveals the impact of the sustained oil price surge on the demand for energy and energy-intensive products. Nevertheless, even on a nominal basis, the trade deficit is no longer deepening, and as the chart below reveals, it has begun improving even with the Asian economies, as the consumer pullback has reduced demand for consumer goods imports from the region.

As oil prices continue to fall back to Earth from their manipulated heights, even the nominal trade deficit will swing around, reducing the leakage of U.S. income flows abroad and improving the multiplier effects of any further tax cuts. While slower income growth in Asia and elsewhere will further expose the folly of now tattered and nearly forgotten global decoupling stories, the good news is inflation-riddled economies in Asia with managed exchange rates will no longer need to soak up as many foreign exchange reserves.

A Tale of Two Trade Deficits



The Money Trade Deficit Is Even Turning With Asia



Given that some investors believe this soaking up of foreign exchange reserves has been the basis of high money supply growth abroad, the reversal of U.S. trade trends may reduce some of the inflation fears in the region. No brokerage house economist, however, will be eager to point out that the above process threatens the beloved “global savings glut” that ostensibly has been holding down long-term interest rates in the United States, as well as juicing up liquidity-related trades in various markets. The excess liquidity story, strangely enough, has been silently thrown overboard, with little fanfare, as required risk premia have widened, and mortgage rates have remained stubbornly elevated despite a much

lower fed funds rate. Apparently, logical consistency remains the hobgoblin of small minds when it comes to the stories dominating financial markets.

A more visible swing in the nominal U.S. trade balance will also draw greater attention to the risks to emerging market economic growth. The global decoupling story is on the ropes, judging by the relative performance of energy, material, industrial and emerging-market equity sectors. The weight of evidence against global decoupling has become undeniable as the summer has progressed, and professional investors are, with a lag, adjusting accordingly. Negative second quarter real GDP growth has already been recorded in several Asian and Latin American nations. Slack growth in the emerging markets may also help reduce inflationary pressures in the region and, thereby, feedback into less import price inflation in the G-7 economies.

SUMMARY AND CONCLUSIONS

Conventional economic theory suggests prices eventually adjust sufficiently to remove conditions of excess demand or excess supply. In the former state, prices rise to dampen demand pressures and encourage new supply. In the latter, prices fall to encourage stronger demand and discourage further production. For mainstream economists, holding supply and demand curves drawn in two-dimensional price/quantity space, the whole world looks like a price equilibrating mechanism.

Last month's *Richebächer Letter* revealed why this simple yet fundamental price adjustment mechanism might not always apply in the case of durable or tangible assets like capital equipment, industrial plants and office buildings, or homes. When the stock of these tangible assets already in existence swamps the flow supply of new production, changes in expectations about the future price of durable assets can create perverse price adjustment effects. This is especially true after the size and composition of the capital stock has been distorted by an asset bubble. Falling prices can lead to expectations of further falls in prices in the future. Existing holders of the asset whose price is falling can decide to sell now rather than later, swamping the shrink in supply of newly produced durable asset that may result from lower prices. In this fashion, lower prices may fail to clear an existing excess supply condition. The price adjustment mechanism can act in a perverse fashion under such conditions.

This month, a similar failure of the price adjustment mechanism was explored with regard to financial asset prices. Here again, the outstanding stock of financial assets, which represent a potential supply of sellable assets, swamps the likely flow supply of newly issued financial assets. Given that conditions of fundamental uncertainty rather than probabilistic risk dominate financial markets, investors have a tendency to adopt herding behaviors, especially when asset price dynamics have departed from the perceived norm. A fall in asset prices, rather than clearing an excess supply in financial markets, can perversely encourage an increase rather than a decrease in excess supply, leading to a further fall in asset price. Under Irving Fisher's analysis, this can lead to a debt deflation path, but this is the extreme. More likely, at least as an initial phase, the attempt by some institutions and households to reduce their debt loads may lead to the paradox of deleveraging.

The supply and demand/price adjustment framework is no doubt a powerful lens through which to view the world, but it is a lens that unfortunately leaves some commonly experienced developments in economies and asset markets relatively unexplained. Breaking the bubble addiction will require, as a first step, some recognition that the conventional view of the price adjustment mechanism is only a partial view. Once a more comprehensive view is allowed — one that allows price signals to influence not only decisions of producers but also decisions of wealth holders — then the basis for a more stable and sensible set of macrofinancial institutions, relationships and behaviors can be established. Dr. Richebächer dedicated his career toward just such a goal, and with any luck, we will find many ways to hew closer to this plumb line he laid down in his life's work.

The incestuous relationship between asset bubbles and credit growth must be broken. The old central bank convention of the Greenspan Doctrine — let the bubbles run, then use a liquidity soaked mop to soak up the mess afterwards — is proving itself to be threadbare in the face of current challenges. The feedback loop from falling money values of financial and tangible assets to consumer spending and household portfolio behavior is becoming more and more visible. The margin of safety — the cushion of capital or liquid assets — in both financial institutions and households has been dangerously eroded over the past quarter century of serial asset bubbles. The feedback loop from reduced household deficit spending to reduced corporate profitability means capital spending is not likely to take up the slack from reduced household spending, regardless of relative price signals vis-a-vis the consumer product sector. The feedback loop from reduced household deficit spending to a reduced trade deficit will provide some offset, but at the risk of reducing income growth abroad, and hence eventually reducing U.S. export growth.

As the depth and duration of this maelstrom reveals itself, it is our sincere hope that the wisdom of breaking the bubble addiction now, rather than later, becomes apparent to more and more economic agents and policymakers. It is time for the travesty that was built up over the course of Dr. Richebächer's professional career to be dismantled, and for a saner, more sensible set of macrofinancial approaches to be set down as the foundation for a more sustainable global growth path.